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EXHIBIT B

IN THE UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF ILLINOIS

OCEAN TOMO, LLC,)
Plaintiff and Counter-defendant,)
v.) No. 12 C 8450
JONATHAN BARNEY and PATENTRATINGS, LLC,	Hon. Joan B. Gottschall Hon. Mary Rowland
Defendants and Counter-plaintiffs.) Hon. Wary Rowland

JONATHAN BARNEY'S AND PATENTRATINGS, LLC'S <u>AMENDED</u> RESPONSE IN OPPOSITION TO OCEAN TOMO, LLC'S MOTION FOR SUMMARY JUDGMENT OF INVALIDITY UNDER 35 U.S.C. § 101

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INTRODUCTION

This Court should deny the motion for summary judgment (the "Motion") filed by Ocean Tomo, LLC ("OT"), because OT fails to satisfy its burden of showing that there is no genuine dispute with respect to any material fact, and that OT is entitled to judgment as a matter of law.

OT argues that its Motion presents only simple, straightforward legal issues under a patent license agreement. OT ignores the broader contractual relationship between OT, Jonathan Barney ("Barney"), and PatentRatings, LLC ("PR"), and various actions taken by OT pursuant to that relationship, including, for example, that:

- The License Agreement was an integral and necessary part of a much broader business transaction that included OT becoming an equity owner of PR and Barney becoming an employee and equity owner of OT;
- OT controlled the *ex parte* prosecution before the United States Patent and Trademark Office (the "Patent Office") of at least four of the patents that are the subject of the Motion, and urged the Patent Office to grant those patents;
- OT advised and encouraged PR to pursue the patents that OT now seeks to invalidate:
- OT is the assignor of at least six of the patents at issue, both directly and because it was in privity with Barney;
- OT concealed revenues received and owed to PR under the License Agreement, and committed other fraudulent acts; and
- In connection with the prosecution of at least three of the patents at issue, OT successfully took positions before the Patent Office that are wholly inconsistent with the arguments OT now makes in the Motion.

As Barney and PR demonstrate below, to the extent that OT cannot dispute these and other material facts in its reply brief, OT's Second and Third Affirmative Defenses fail. If OT does dispute these facts, the Motion should be denied because there are triable issues of material fact.

BACKGROUND

A. The PatentRatings System ("PRS")

In 1999, Barney and his brother, James Barney, invented and applied for patent rights to various software, systems, and methods for statistically analyzing, rating and valuing patents (together, the "PRS"). (Barney's and PR's Local Rule 56.1(b)(3)(b) Statement of Additional Facts ("Add'l Facts") ¶ 1; Declaration of Jonathan Barney ("Barney Decl.") ¶ 2.)¹ Among other things, the PRS software can quantitatively analyze and determine an objective numerical score that uniquely estimates the relative quality or expected value of a particular patent according to a determined statistical accuracy. (Add'l Facts ¶ 2; Barney Decl. ¶ 2.) Barney formed PR in 2001 to exploit the variety of important and valuable uses the PRS would have in the consulting and financial sectors. (Barney Decl. ¶ 3.)

PR soon established itself as a leading authority on quantitative patent analysis, ratings, and valuations using its proprietary PRS software. (Barney Decl. ¶ 4.) PR formed a distribution partnership with LexisNexis, and began selling consulting services and reports to companies such as Boeing, Kimberly-Clark, Rockwell Scientific, Samsung, and Motorola and to government entities, including the Internal Revenue Service. (*Id.*) PR's annual revenues grew from less than a few thousand dollars in 2002 to \$94,400 in 2003 and \$150,100 in 2004. (*Id.* ¶ 5.) By the end of 2004, PR was a small, fast-growing company with positive cash flow and very little debt. (*Id.*)

¹ Pursuant to Local Rule 56.1(b)(3)(B), the Statement of Additional Facts sets forth the material facts that Barney and PR believe require denial of the Motion. The Barney Declaration also sets forth additional facts that, while not material facts under Rule 56, are provided to place the current issues in proper context.

B. <u>In Order to Gain Access to the PRS, OT Persuades Barney and PR to Enter Into a "Business Marriage"</u>

Word of the PRS quickly spread, and a number of people and entities reached out to Barney to express interest in the system. (Barney Decl. ¶ 6.) OT's founder, Chairman, and CEO, James Malackowski ("Malackowski"), first approached Barney in early 2004 with a proposal to acquire a license to use the PRS for OT's business. (*Id.*) Malackowski described to Barney how OT could leverage and exploit the PRS on a vastly larger scale and generate more revenues and profits for PR and Barney than they ever could achieve on their own. (*Id.*)

Barney and PR were persuaded by Malackowski's pitch. (Barney Decl. ¶ 7.) Barney, PR, and OT ultimately negotiated a multi-agreement transaction that included a September 1, 2004 license agreement (as amended by an amendment dated May 2, 2005, the "License Agreement"), a December 31, 2004 equity exchange agreement (the "Equity Exchange Agreement"), a December 31, 2004 letter agreement (the "Letter Agreement"), and an employment agreement dated January 1, 2005 (as amended by an amendment dated July 28, 2008, the "Employment Agreement"). (Add'l Facts ¶ 3; Barney Decl. ¶ 7; Exs. 1-6.)

Among other things, these transactions provided that:

- OT would acquire 25% of the equity in PR from Barney (Equity Exchange Agreement, Ex. 1 § 2.1(a));
- Barney would acquire approximately 6.8% of the then-outstanding equity in OT from OT (Id. § 2.1(b));
- PR granted OT a royalty-free limited exclusive license to use the PR System for its own internal use, in exchange for a promise to pay PR 100% of any revenues collected by OT from the sale of PR products and services to its clients. (License Agreement, Ex. 2 §§ 3.1, 4.1-4.4); and
- Barney would become a full-time employee of OT. (Employment Agreement, Ex. 5 § 2.1, 2.3).

Barney was specifically employed by OT in part to start up OT's quantitative patent analysis business. (Add'l Facts ¶ 6; Barney Decl. ¶ 10.)

OT characterized the transaction as a "business marriage" which it later summarized and described as follows:

Both OT and PR believed that [their respective] goals could be achieved by what amounted to a business marriage under which: (1) OT would establish an OT PR division ("OTPR"), to be headed by Barney, having access to OT's client relationships and industry reputation, which would market the PR data and reports; (2) PR would be responsible to maintain its system and database to supply this information to OT [and others]; (3) OT would pay to PR 100% of the revenues received from its sales of data and reports; and (4) in exchange, OT would have royalty free access to the PR system and data for use in furthering its intellectual property merchant banking business.

(Barney Decl. ¶ 11; Ex. 10 at 4-5.)

C. The Honeymoon

Barney became a Managing Director at OT on January 1, 2005. (Add'l Facts ¶ 7; Barney Decl. ¶ 12.) From 2005 until early 2011, Barney consistently devoted his time, talent, energy, and creativity to OT. (Barney Decl. ¶ 12.) PR provided OT with its full support and assistance in further developing and exploiting the PRS for the mutual benefit of OT and PR. (*Id.*) PR also provided, at OT's request, detailed Confidential Information (as defined in the License Agreement) sufficient to enable OT to operate, maintain, and improve the PRS on its own in the event that Barney was no longer able to do so (such as in the event of his death or incapacity). (*Id.*)

Barney and Malackowski jointly decided to begin generating quantitative patent analysis using the PRS software. (Add'l Facts ¶ 8; Barney Decl. ¶ 13). Barney was in charge of OT's quantitative patent analysis business and related operations. (Add'l Facts ¶ 9; Barney Decl. ¶ 13.) OT began selling OT-generated quantitative patent analysis and related products and services to its clients in 2005. (Add'l Facts ¶ 10; Barney Decl. ¶ 13).

OT began to enjoy the fruits of its new quantitative patent analysis business almost immediately. (Barney Decl. ¶ 14.) In one of its first applications of the PRS software, OT evaluated six patents owned by a company being liquidated in bankruptcy. (*Id.*) After the PRS software indicated that the patents were likely very valuable (rated "A+"), OT used that information to persuade the bankruptcy judge to auction the patent assets separately from the company's other assets and to use OT as the selling agent. (*Id.*) OT auctioned the patents for \$15.5 million and netted itself a substantial commission. (*Id.*) In a congratulatory email to Barney and others, then OT senior executive Dean Becker stated: "I think we should take out a full page ad in the WSJ and say that the bankruptcy court valued [the] patents [at] Zero and we OT, using our [PRS] software and in-house, legal, valuators and anylists [sic], convinced the judge that [the] patents had great value and sold them for 15.5 CASH in 60 days!" (*Id.* ¶ 15; Ex. 11.)

In June 2005, OT secured a \$200 million investment from billionaire Ross Perot to back a private equity fund created and managed by OT to buy companies with undervalued patent portfolios as determined by the PRS. (Barney Decl. ¶ 16; Ex. 12.) News of the Perot investment and the new private equity fund was widely reported by the media, including several feature articles appearing in *The Wall Street Journal* and in *Forbes*. (Barney Decl. ¶ 16; Exs. 13-14.)

OT built a proprietary web platform and charged corporate subscription clients annual fees of over \$100,000 each to access scores, ratings, valuations, and other quantitative analysis generated by the PRS. (Add'l Facts ¶ 11; Barney Decl. ¶ 17.) On August 10, 2005, Malackowski wrote to Barney: "Everything that you and I hoped would happen with our partnership is happening. The fit between PR and OT from my view is ideal." (Barney Decl. ¶ 18; Ex. 15.)

In late 2005, OT recruited and hired Keith Cardoza ("Cardoza") to investigate possible investment strategies that might be built around the PRS. (Barney Decl. ¶ 19.) Barney worked with

Cardoza for more than a year developing new investment strategies built around the PRS. (Id.) In October 2006, OT launched the OT300 index, which OT has described as "the industry's first index based on the value of intellectual property, and represents a diversified portfolio of 300 companies that own the most valuable patents relative to their book value." (Id. ¶ 20.)

The OT300 achieved nearly instant success and generated significant media buzz for OT. (Barney Decl. ¶ 21; Exs. 16-18.) On April 1, 2007, Cardoza sent an email to Barney, in which Cardoza stated:

Our second IPO is happening tomorrow. The Claymore/OT Growth Index ETF, which will track the OT 300 Patent Growth Index goes live tomorrow at 6:30 Pacific time. The symbol will be OTR for OT Ratings, in honor of PR.

Did you ever think that when you created PR you would have provided the catalyst to create a new asset class? This morning I was reminded of the article below that compared what you have done for the financial markets is what Einstein did for physics.

If PR is this powerful now, can you imagine the worlds of investment opportunities it will open up five years from now . . ten years from now?? I think it so cool that when your future grandchildren eventually study business, it will be their grandfather that they read about who transformed the way we value corporate assets. Thanks for all that you've created.

(Barney Decl. ¶ 22; Ex. 19.)

OT continued to leverage the PRS and the OT300 in its marketing and sales efforts. (Barney Decl. \P 23.) Malackowski appeared on national television shows such as CNBC and Bloomberg TV, to talk about the OT300 and its unique quantitative tools for measuring patent value. (*Id.*) OT soon started developing a suite of similar financial products and derivative financial instruments – all feeding off of the quantitative analysis and proprietary metrics produced by the PRS. (*Id.* \P 24.)

These expanded and novel uses required improvements to the existing PRS. (Barney Decl. ¶ 25.) PR did not have the capital for those improvements. (*Id.*) OT agreed to provide the capital by

way of loans to PR. (*Id.*) PR and OT entered into a Management Services Agreement dated May 31, 2005 (the "MSA"), by which, among other things, OT assumed managerial control of PR, including authority to lend money to PR. (Add'l Facts ¶ 12; Docket No. 89 at 15; Barney Decl. ¶ 25; Ex. 9 § 1.1.) Under the MSA, OT hired and managed all of the personnel and contractors engaged to build OT's desired improvements to the PRS. (Add'l Facts ¶ 13; Barney Decl. ¶ 25; Ex. 9.)

As an employee of OT, Barney continued to improve the PRS and conceived and developed several additional inventions, including the inventions disclosed and claimed in the '226, '701, '560, '996, '476 and '581 Patents that are the subject of OT's Motion. (Add'1 Facts ¶ 14; Barney Decl. ¶ 26; Ex. 20-22.)

During this period, OT controlled the *ex parte* prosecution before the Patent Office of at least four of the eight patents that OT now seeks to invalidate. (Add'l Facts ¶¶ 19-21; Barney Decl. ¶ 27-29; Declaration of David C. Layden ("Layden Decl.") ¶¶ 2-5; Exs. 23A at 1; 2423B at 1; and 24A-24D.) During the prosecution of those patents, OT presented claim amendments and arguments specifically urging the Patent Office to grant each patent, and arguing that the claimed inventions met all of the requirements for patentability. (Add'l Facts ¶ 22; Layden Decl. ¶¶ 6-8; Exs. 25 at 1, 3; 27 at 8-9; 29 at 7.)

In at least three of those cases (the '476, '226 and '511 patents), OT specifically argued to the Patent Office that the claimed inventions met the requirements for patent eligibility under § 101. (Add'l Facts ¶ 23; Layden Decl. ¶¶ 6-8, 6; Ex. 25 at 1; Ex. 27 at 8-9; Ex. 29 at 7.) In at least two of those cases (the '226 and '511 patents), OT's in-house counsel, Joel Lutzker (who also is counsel for OT in this action), personally attended and participated in interviews with the patent examiner. (Add'l Facts ¶ 24; Layden Decl. ¶¶ 6-8; Ex. 25 at 1-3; Ex. 27 at 8-9.) In those interviews,

Mr. Lutzker and/or counsel working at his direction presented specific claim amendments and arguments designed to persuade the examiner that the claims complied with § 101 and defined patentable improvements over the cited prior art, including, specifically, the Lanjouw reference (NBER Working Paper 6297) and the CHI "neighbor searching algorithm" (Breitzman US2006/0074867) extensively relied upon by Dr. Thomas in his declaration submitted in support of the Motion. (*See* Thomas Decl. at ¶ 29, 36-37, 39, 53, 88-89, 131, 138 and 147; Add'l Facts ¶ 25; Layden Decl. ¶ 6-9; Ex. 25 at 1-3; Ex. 27 at 8-9.)

D. The Marriage Begins to Sour

The rapid pace of development placed enormous demands on Barney and PR and greatly increased the cost to develop, operate, and maintain the PRS. (Barney Decl. ¶ 34.) The mounting expenses became a point of considerable contention between OT and PR. (*Id.*) At one point, Malackowski asserted to Barney that OT had incurred expenses in excess of \$2 million for various improvements to the PRS software, that these expenses were "loans" under the MSA, and that PR was obligated to repay them. (*Id.*)

By mid-2007, Barney had become highly dissatisfied with the state of affairs between OT and PR. (Barney Decl. ¶ 35.) Barney had no day-to-day control over the business he founded or the "loans" OT continued to foist upon PR with no apparent accountability, all to feed OT's appetite for more data and bigger and faster delivery platforms. (*Id.*)

Barney and Malackowski ultimately reached a compromise, under which OT agreed to terminate and nullify the MSA and to take over all further operating expenses of building, operating and maintaining the PRS software and related databases. (Barney Decl. ¶ 36.) In exchange, PR agreed to execute a promissory note for \$1.5 million (the "Note"), grant OT a security interest in all of its patents and other assets, and to reduce its share of PRS-related

revenues from 100% to 25% (or 13.25% in certain cases). (*Id.*) That compromise was embodied in a July 19, 2007 Amendment to the License Agreement. (*Id.*; Ex. 8.)

Prior to and at the time Barney executed the Amendment on behalf of PR, Malackowski repeatedly assured Barney that, among other things, OT would assume the obligation for all further expenses associated with OT's use and continued development of the PRS, and that PR would have no further obligation for such expenses. (Barney Decl. ¶ 37.) Those statements were reiterated by Ray Millien, OT's in-house counsel who drafted the agreement documents. (*Id.*)

Barney believed that the Amendment had resolved the disputes, and he continued to serve as a Managing Director at OT and continued to work hard improving the PRS and helping OT grow and expand its business. (Barney Decl. ¶ 38.)

E. The Beginning of the End

OT's fortunes began to falter in 2009 as the world economy sank into a deep recession. By mid-2009, OT already had laid off a sizeable portion of its workforce, but further reductions were necessary to keep the company solvent. (Barney Decl. ¶ 39.)

On November 12, 2009, senior OT executive Michael Friedman emailed Malackowski, and stated: "I don't know the history, but it seems a little asymmetric that OT owns 25% of PR but funds 100% of its development. . . . We need to think hard about whether we can afford the PR status quo." (Barney Decl. ¶ 40; Ex. 30.) Malackowski forwarded that email to Barney, beginning a dialogue that would develop over the next year. (Barney Decl. ¶ 40.) In July 2010, another other senior executive of OT, Jake Geleerd, suggested during a telephone call that PR should "help us by accruing its royalty payments until we reached our break even goal." (*Id.* ¶ 41.) In January 2011, Geleerd stated to Barney for the first time that PR had a "legal obligation" to assume all of the PRS database production and maintenance costs. (*Id.*) Shortly thereafter, OT sent a letter formally demanding that PR pay all PRS-related costs on a going-forward basis and reimburse (or accrue as

secured debt) up to \$5 million in previously expended amounts allegedly incurred by OT. (*Id.*; Ex. 31.)

F. The Breakup

The parties' business marriage came to an unceremonious end in February 2011, when OT commenced an arbitration proceeding against PR (the "Arbitration"). (Barney Decl. ¶ 42.) After more than a year of litigation and a one-week hearing, a three-arbitrator panel denied all of OT's claims, "find[ing] no such obligations in the agreements between the parties" and "no evidence that PR [was] in violation of any agreement between the parties." (Barney Decl. ¶ 42; Ex. 33 at 6, 10.)

While PR ultimately prevailed in the Arbitration, the victory was bittersweet, because PR spent hundreds of thousands of dollars and thousands of man-hours defending itself against OT's meritless claims. (Barney Decl. ¶ 43.) The dispute and resulting conflicts also forced Barney to resign his employment with OT. (*Id.*)

G. The Custody Battle

Following the Arbitration, OT embarked on one scheme after another designed to deprive PR and Barney of the benefits they bargained for and were entitled to receive under the terms of their agreements with OT. (Barney Decl. ¶ 44.) OT defaulted on its contractual obligations, concealed revenues, impaired Barney's and PR's ability to earn income from other sources, and brought and maintained multiple baseless litigation claims against Barney and PR – all with the goal of pummeling Barney and PR financially so that OT could steal the PRS and the underlying databases, algorithms, trade secrets, and other valuable intellectual property owned by PR. (*Id.*)

For example, as a result of discovery in the Arbitration, PR became aware that OT was routinely selling PRS-related products and reports to clients without reporting or paying revenues to PR. (Barney Decl. ¶ 45.) PR requested that OT investigate and correct its reporting processes

and identify the extent of underreporting, but OT refused to do so. (*Id.*) In or about January 2012, PR attempted to exercise its audit rights under the License Agreement, but OT refused to allow the auditors to access the required information. (Barney Decl. ¶ 46; Ex. 36.) Instead, OT continued to conceal the previously underreported revenues and concocted yet additional schemes and devices (such as bifurcated billing) designed to conceal and/or underreport revenues owed to PR under the License Agreement. (Barney Decl. ¶ 46.) Discovery has not yet been completed with respect to full scope of OT's concealment and underreporting of revenues.

OT has used PR's Confidential Information (as defined in the License Agreement) to develop OT's own patent ratings system (which OT calls the "Ocean Tomo Ratings™ system" or "OTR"), in violation of the License Agreement and the Supplemental License Agreement, which it currently promotes, advertises, and markets under its own *Ocean Tomo* brand without the consent or authorization of PR. (Barney Decl. ¶ 47.) OT also has modified the PRS in violation of the License Agreement by removing some or all of PR's branding and trademarks (*e.g.*, "PatentRatings" and "IPQ"), and replacing them with OT-exclusive branding (*e.g.*, "Ocean Tomo Ratings" and "OTR"), thereby threatening to irreparably harm the value of PR's branding and trademarks and to destroy all of the associated good will that PR has built up over the course of more than a decade. (Barney Decl. ¶ 48.)

ARGUMENT

I. TO BE ENTITLED TO SUMMARY JUDGMENT, OT MUST SHOW THAT THERE IS NO GENUINE DISPUTE AS TO ANY MATERIAL FACT AND THAT IT IS ENTITLED TO JUDGMENT AS A MATTER OF LAW.

Summary judgment is appropriate only when the movant shows there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law. Fed. R. Civ. P. 56; *Smith v. Hope Sch.*, 560 F.3d 694, 699 (7th Cir. 2009). "[A] factual dispute is 'genuine' only if a reasonable jury could find for either party." *Elizarri v. Sheriff of Cook County*, No. 07-cv-2427,

2015 WL 1538150, at *2 (March 31, 2015) (citing *SMS Demag Aktiengesellschaft v. Material Scis. Corp.*, 565 F.3d 365, 368 (7th Cir. 2009)). The court ruling on the motion must construe all facts and make all reasonable inferences in the light most favorable to the nonmoving party. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986).

II. THIS COURT SHOULD DENY THE MOTION BECAUSE OT'S SECOND AFFIRMATIVE DEFENSE FAILS AS A MATTER OF LAW, AND BECAUSE OT HAS FAILED TO DEMONSTRATE THAT THERE IS NO GENUINE DISPUTE OF ANY MATERIAL FACT.

Contrary to what OT argues (*see* OT Supp. Mem. at 3), it is not entitled to summary judgment on its Second Affirmative Defense. In that defense, OT alleges:

Counts III and VI of PR's Counterclaims fail because PR is not entitled to collect royalties allegedly due under, or relief for any alleged breach of, the License Agreement because the patents that are part of the PR Tools (as that term is defined in OT's Complaint) are invalid for failure to comply with the requirements for patentability under the patent laws, including, but not limited to, 35 U.S.C. §§ 101, 102, 103, and/or 112.

(Docket No. 89 at 40.) As demonstrated below, OT's Motion should be denied with respect to its Second Affirmative Defense for two reasons.

First, the cases cited by OT (see OT Supp. Mem. at 3-4) do not support the novel proposition urged by OT: that a finding of invalidity of a patent automatically and absolutely absolves a party of all liability for breaches of contract and fraud. (See id.) Instead, at most, those cases support an argument that, in the case of a patent license, if all patents covering the licensed product are expired or declared invalid, a party can avoid liability for unpaid patent royalties accruing after the invalidity challenge is brought. See, e.g., Studiengesellschaft Kohle, M.B.H. v.

Shell Oil Co., 112 F.3d 1561, 1568 (Fed. Cir. 1997). OT's Second Affirmative Defense therefore fails as a matter of law.

Second, OT does not even attempt to satisfy its burden of establishing that there are no genuine disputes of material fact, and that it is entitled to judgment on its Second Affirmative Defense as a matter of law. In order to assert patent invalidity as a defense to a breach of contract action, the breaching party must establish that the validity of the challenged patent was so material and important to the parties' agreement that its invalidity (if proven) excuses the breaches of the agreement. See, e.g., Baladevon, Inc. v. Abbott Labs., Inc., 871 F. Supp. 89, 96 (D. Mass. 1994) (finding that patent invalidity defense failed where "issuance of the patents was not a significant factor in the agreement"); Natural Alternatives, LLC v. JM Farms, No. 5:12-CV-333-KKC, 2014 WL 6774497, at *2 n.1 (E.D. Ky. Dec. 2, 2014) (noting that patent invalidity defense only is viable if the defendant can establish that the "patents are so critical to the agreement that their invalidity excuses [defendant's] performance"); Sybron Transition Corp. v. Nixon, Hargrave, Devans & Doyle, 770 F. Supp. 803, 812-13 (W.D.N.Y. 1991) (holding that, where an "agreement was supported by consideration other than the [challenged] patent . . . the affirmative defenses of patent invalidity [are ineffective] because the invalidity of [the] patent, even if proven, would have made no legal difference.").

OT does not even attempt to argue that it has made this showing. (*See* OT Supp. Mem. at 1-3.) OT instead makes only the conclusory assertion (without any supporting facts) that "PR's patented technology is the foundation of the parties' business relationship" (OT Mem. at 2.)

² The License Agreement also includes other pending patent applications (the validity of which OT has not challenged) and non-patent intellectual property rights (*e.g.*, copyrights, trade secrets, and trademarks). OT cannot avoid liability for its continuing use of these other intellectual property rights which are not challenged.

This fails to satisfy OT's burden of demonstrating that there are no genuine disputes of material fact with respect to the materiality of the patents to the License Agreement.

Moreover, even if OT had tried to show that the patents at issue are "so critical" to the License Agreement that their invalidity would excuse OT's breaches, that effort would fail, because, at best, there are genuine disputes of material fact as to that issue. As the Seventh Circuit has observed:

[T]he determination of "materiality" is a complicated question of fact, involving an inquiry into such matters as whether the breach worked to defeat the bargained-for objective of the parties or caused disproportionate prejudice to the non-breaching party, whether custom and usage considers such a breach to be material, and whether the allowance of reciprocal non-performance by the non-breaching party will result in his accrual of an unreasonable or unfair advantage. All of these issues must be resolved with reference to the intent of the parties as evidenced in large part by the full circumstances of the transaction, thus making these issues especially unsuited to resolution by summary judgment." (internal citations omitted)

Sahadi v. Cont'l Illinois Nat. Bank & Trust Co., 706 F.2d 193, 196 (7th Cir. 1983); accord Freight Train Advertising, LLC v. Chicago Rail Link, LLC, No. 11 C 2803, 2012 WL 5520400, at *8 (N.D. Ill. Nov. 14, 2012) ("The determination of materiality is ordinarily not suited [for] summary judgment because it is 'a complicated question of fact.") (quoting Sahadi, 706 F.2d at 196).

To be sure, OT's payment obligations arise from the provisions of the License Agreement. (Ex. 2, Art. 4.) But these are not "royalties" paid in *quid pro quo* exchange for a "patent license," as OT seems to argue. Instead, these payment obligations were "a necessary and integral part" of the Equity Exchange Agreement, which contemplated, among other things, OT becoming a 25% minority owner and manager of PR, OT's employment of Barney, PR's agreement not to compete with OT, and the delivery to OT of the PRS. (Ex. 1, § 2.3.) While the License Agreement granted OT certain additional rights to use PR's "technology, know-how, software . . . and other [related] intellectual property . . . (including the PR Patents, PR Copyrights and PR Marks)," the payment

obligations in the License Agreement do not arise from and are not materially related to the existence or validity of PR's patents. (Ex. 2, § 1.11.)³

The PRS (including the underlying software, databases, and related documentation) is owned by PR. (Ex. 2, §§ 3.2(b), 5.1, 5.3.) OT's access and use of the system is governed by the contractual obligations set forth in the License Agreement. (Ex. 2, §§ 3.1-3.2.) Whether that system is covered by patents and whether those patents are valid or invalid is irrelevant to PR's ownership of, and right to control access and use of, the PRS.

For all of these reasons, this Court should deny the Motion with respect to OT's Second Affirmative Defense.

III. THIS COURT SHOULD DENY THE MOTION BECAUSE OT'S THIRD AFFIRMATIVE DEFENSE FAILS AS A MATTER OF LAW, AND BECAUSE OT HAS FAILED TO DEMONSTRATE THAT THERE ARE NO GENUINE DISPUTES OF MATERIAL FACT.

OT alleges, as its Third Affirmative Defense, that: Counts III and VI of PR's Counterclaims fail because PR is not entitled to collect royalties allegedly due under, or relief for any alleged breach of, the License Agreement because the License Agreement is unenforceable due to PR's misuse of the patents and copyrights licensed in the License Agreement. (Docket No. 89 at 40.) OT argues that "a finding of invalidity as to the patents-in-suit would warrant the entry of summary judgment" on OT's Third Affirmative Defense. (*See* OT Supp. Mem. at 3.) According to OT, an invalidity finding by this Court would render the License Agreement "illegal *per se*, and any attempt by [PR] to collect royalties thereunder would constitute misuse under *Brulotte*, *Lear*, and their progeny." (*Id.*)

³ As noted above, the only payment obligations even arguably relevant to OT's patent invalidity defenses are unpaid royalties accruing after OT filed its motion on January 30, 2015. *See Shell Oil*, 112 F.3d at 1562 (holding that, even when a patent is found invalid, "Licensor [can still] recover

To establish an affirmative defense of patent misuse, OT must demonstrate that PR used the "leverage" of a patent to impose overbroad conditions on the use of the patented technology that were "not within the reach of the monopoly granted by the Government," and which have anticompetitive effects. *Princo Corp. v. Int. Trade Com'n*, 616 F.3d 1318, 1328 (Fed. Cir. 2010), *cert. denied*, 131 S. Ct. U.S. 2480 (2011) (holding that the doctrine of patent misuse is "grounded in the policy-based desire to 'prevent a patentee from using the patent to obtain market benefit beyond that which inheres in the statutory patent right.' . . . the key inquiry under the patent misuse doctrine is whether . . . the patentee has impermissibly broadened the physical or temporal scope of the patent grant and has done so in a manner that has anticompetitive effects.")

OT fails to satisfy its burden under Rule 56 with respect to this affirmative defense because, among other things, OT does not: (a) identify even a single instance of alleged "misuse"; or (b) show resulting anticompetitive effects in a relevant market. (*See* OT Supp. Mem. at 1-3.) Nor could OT make that showing. Here, there was no "leverage" because the patents were merely incidental to the broader business transaction between the parties. (*See* Barney Decl. ¶ 7; Exs. 1-6.) There is no provision in the License Agreement (or any other agreement between the parties) that either: obligates PR to obtain or maintain any patents covering the PRS; conditions any payment obligation on the scope or validity of any patents held by PR; or excuses OT from any legal or contractual obligations based on the validity or invalidity of any patents held by PR. (*See* Ex. 2 §§ 4.1-4.3.) Indeed, PR could have simply abandoned, sold, or not pursued any of the challenged patents, at any time, without breaching the License Agreement or any other agreement between the parties.

damages for breach of contract for past royalties due . . . from the date of the alleged breach until the date that the Licensee first challenged validity of the claims.")

For the reasons set forth above, OT fails to satisfy its burden under Rule 56 with respect to its Second and Third Affirmative Defenses, and this Court thus should deny the Motion. With the failure of the Motion with respect to those defenses, OT's validity challenge is moot. *See Cardinal Chemical Co. v. Morton Int'l, Inc.*, 508 US 83, 93 (1993) (noting that, in determining mootness, an affirmative defense of patent invalidity is "critically different" than a counterclaim for declaratory judgment of patent invalidity); *see also Wireless Ink Corp. v. Facebook, Inc.*, 969 F. Supp. 2d 318, 338-39 (S.D.N.Y. 2013) ("[W]here, as here, the issue of invalidity is raised solely as an affirmative defense, rather than as a counterclaim for declaratory judgment, a district court's resolution of the invalidity issue after a finding of non-infringement constitutes unnecessary dicta, if not, in certain circumstances, reversible error.").

If, however, this Court determines that is necessary to consider OT's invalidity arguments, Barney and PR respectfully submit that this Court first must consider whether the doctrines of equitable estoppel, assignor estoppel, and judicial estoppel preclude OT from challenging the validity of the patents at issue.

IV. GENUINE ISSUES OF MATERIAL FACT EXIST REGARDING WHETHER OT'S MOTION IS BARRED BY THE DOCTRINE OF EQUITABLE ESTOPPEL.

As Barney and PR demonstrate below, there are, at the very least, genuine disputes of material fact as to whether OT is barred by those doctrines from asserting alleged invalidity in this case, which also require denial of the Motion.

OT likely will argue that, in the typical patent licensing context, patent validity challenges may be raised as an affirmative defense to a contract claim for payment of royalties under the doctrine set forth in *Lear*, *Inc. v. Atkins*, 395 U.S. 653 (1969). The *Lear* doctrine, however (which seeks to balance the equities among patent licensors and licensees against the public interest in eliminating worthless patents), "does not grant every licensee in every circumstance the right to

challenge the validity of the licensed patent." *Gen-Probe Inc. v. Vysis, Inc.*, 359 F.3d 1376, 1381 (Fed. Cir. 2004), *abrogated on other grounds*, *MedImmune, Inc. v. Genentech, Inc.*, 549 U.S. 118 (2007). "[D]espite the public policy encouraging people to challenge potentially invalid patents, there are still circumstances in which the equities of the contractual relationships between the parties should deprive one party . . . of the right to bring that challenge." *Diamond Scientific Co. v. Ambico, Inc.*, 848 F.2d 1220, 1224-25 (Fed. Cir. 1988), *cert. dismissed*, 487 U.S. 1265 (1988); *see also Roberts v. Sears, Roebuck & Co.*, 573 F. 2d 976, 982 (7th Cir. 1978) (holding that *Lear* does not bar a plaintiff's recovery where "[t]here is no balance of equities between [defendant/licensee] and plaintiff in their contractual relations.")

In this case there are, at the very least, genuine disputes of material fact with respect to whether the facts and circumstances here present a situation "in which the equities of the contractual relationships between the parties should deprive one party . . . of the right to bring [a patent invalidity] challenge." *Diamond Scientific*, 848 F.2d at 1224-25.

For example, unlike the licensee in *Lear*, OT had every opportunity to present its invalidity arguments to the Patent Office while the patents were still pending, before they were officially granted, and before the presumption of validity attached. Precluding OT from challenging these particular patents would not frustrate the policies of *Lear*.

A. OT Controlled The Prosecution Of And Urged The Patent Office To Grant The Patents It Now Seeks To Invalidate.

OT controlled (either directly or through its attorneys) the *ex parte* prosecution before the Patent Office of at least four of the eight patents it now seeks to invalidate.⁴ (Add'1 Facts ¶¶ 19-21; Barney Decl. ¶¶ 27-29; Exs. 23-24.A, 23B, 24A-D.) From January 19, 2007 until about June 13,

⁴ These patents include the '476, '226, '581, and '511 Patents. (Add'l Facts \P 19; Barney Decl. \P 27.)

2011, OT exclusively controlled the prosecution of these patents through its outside counsel under a Joint Representation Agreement, which provided in relevant part: "OT will have sole authority to instruct [counsel] with respect to the Patent Portfolio and [counsel] is authorized to take instructions only from OT. [Counsel] will communicate only with OT regarding issues related to the Patent Portfolio." (Add'l Facts ¶ 21; Barney Decl. ¶ 29; Ex. 23A at 1.)

During its prosecution of those patents, OT presented claim amendments and arguments specifically urging the Patent Office to grant each patent and arguing that the claimed inventions met all of the requirements for patentability. (Add'l Facts ¶ 22; Ex. 25 at 1, 3; Ex. 27 at 8-9; Ex. 28 at 6-12, Ex. 29 at 7.) In at least three of those cases (the '476, '226 and '511 patents), OT specifically argued to the Patent Office that the claimed inventions met the requirements for patent eligibility under § 101. (Add'l Facts ¶ 23; Ex. 25 at 1-3; Ex. 27 at 8-9; Ex. 29 at 7.) In at least two of those cases (the '226 and '511 patents) OT's counsel, Joel Lutzker, personally attended and participated in interviews with the patent examiner. (Add'l Facts ¶ 24; Ex. 25 at 1-3; Ex. 27 at 8-9.) In those interviews, Mr. Lutzker and/or counsel working at his direction presented specific claim amendments and arguments designed to persuade the examiner that the claims complied with § 101 and defined patentable improvements over the cited prior art, including, specifically, the Lanjouw reference (NBER Working Paper 6297) and the CHI "neighbor searching algorithm" (Breitzman US2006/0074867) extensively relied upon by Dr. Thomas in his declaration submitted by OT in connection with the Motion. (Add'l Facts ¶ 25; Ex. 25 at 1-3; Ex. 27 at 8-9; Thomas Decl. ¶¶ 29, 36-37, 39, 53, 88-89, 131, 138 and 147.)

Thus, unlike the licensee in *Lear*, OT affirmatively argued to the Patent Office that the claimed inventions met all of the requirements for patentability (including patent eligibility under

§ 101). Precluding OT from challenging these particular patents would not frustrate the policies of *Lear*.

B. OT Advised And Encouraged PR To Pursue The Patents It Now Seeks To Invalidate.

When each of the above-identified patents was filed and prosecuted, OT was PR's largest minority owner, manager, legal advisor, and exclusive licensee. (Add'l Facts ¶ 26; Barney Decl. ¶ 30.) As PR's manager and legal advisor, OT specifically advised and encouraged Barney and PR to pursue each of the above-identified patents. (Add'l Facts ¶ 27; Barney Decl. ¶ 30; Exs. 38-39.) Based on that advice and encouragement, PR pursued and agreed to finance the preparation, filing, and prosecution of the above-identified patents by OT even though PR had no contractual obligation to do so. (Add'l Facts ¶ 28; Barney Decl. ¶ 30; Ex. 2, § 5.3.)

Thus, unlike the licensee in *Lear*, OT made its own bed by advising and encouraging Barney and PR to pursue the above-identified patents for the benefit of OT. Precluding OT from challenging these particular patents would not frustrate the policies of *Lear*.

C. OT Substantially Benefitted From The Patents It Now Seeks To Invalidate.

The *Lear* Court recognized that there may be significant value in the rights to an unchallenged patent (even if later proven invalid) and that even the important public interests sought to be advanced by the Court are not necessarily frustrated by a licensor's claims for compensation based on the value conferred. *Lear*, 395 U.S. at 669-672.

OT significantly benefitted, and continues to benefit, from the patents it now seeks to invalidate. Indeed, as recently as July 18, 2014, OT notified PR of a "suspected infringement" by a competitor and requested PR to "immediately take action against [the competitor because] its active presence in the market with its low price offerings has critically impaired our market position and revenues." (Add'l Facts ¶ 31; Barney Decl. ¶ 33; Ex. 40.) Thus, even if OT could

demonstrate invalidity, PR would still be entitled to recover some or all of its claimed damages based on the significant value the patents have conferred upon OT. *Lear*, 395 U.S. at 669-672.

For all of these reasons, precluding OT from challenging the patents on the basis of patent eligibility under § 101 would not frustrate the policies of *Lear*.

D. OT Concealed And/Or Failed to Report Revenues Owed To PR Under The License Agreement.

A licensee that materially breaches a license agreement by failing to adequately report and pay revenues owed cannot rely on *Lear* to avoid the liabilities stemming from those very breaches. *See Shell Oil*, 112 F.3d at 1568 ("[T]his court must prevent the injustice of allowing Shell to exploit the protection of the contract and patent rights and then later to abandon conveniently its obligations under those same rights."). Here, OT concealed and/or failed to adequately report revenues owed to PR. (Add'l Facts ¶ 32; Barney Decl. ¶ 45; Ex. 37-34.) OT cannot rely on patent invalidity defenses to avoid the contractual payment obligations it fraudulently concealed and/or otherwise failed to report in material breach of the License Agreement. *Shell Oil*, 112 F.3d at 1568.

E. OT Committed Other Fraudulent Acts.

A party who commits fraud cannot rely on the equitable doctrine of *Lear* to avoid liability. *See, e.g., Roberts*, 573 F. 2d at 982. In *Roberts*, the Seventh Circuit addressed and distinguished *Lear* as follows:

[F]undamentally, the Court's analysis in Lear initiated with an assessment of 'the spirit of contract law, which seeks to balance the claims of promisor and promisee in accord with the requirements of good faith.' Only after the Court satisfied itself that the equities were balanced on each side did it proceed to a consideration of the needs of patent law and the public interest. Sears' actions in this matter have violated completely the basic assumption in Lear that there was good faith in the dealings between the parties. There is no balance of equities between Sears and plaintiff in their contractual relations. For this court to employ the public interest in patent law to sanction Sears' conduct is unjustifiable. Certainly nothing in patent law requires this court to permit fraud to go unremedied."

Roberts, 573 F.2d at 982 (internal citations omitted). Here, OT committed other fraudulent acts, such as fraudulently inducing PR to enter into the 2007 Amendment, the Note and the Security Agreement (*see* Add'1 Facts ¶ 33-34; Barney Decl. ¶ 37), and therefore is precluded from relying upon *Lear*. *Roberts*, 573 F.2d at 982.

V. THERE ARE GENUINE DISPUTES OF MATERIAL FACT WITH RESPECT TO WHETHER OT IS BARRED BY ASSIGNOR ESTOPPEL FROM ATTACKING THE VALIDITY OF PR'S PATENTS.

OT also cannot meet its burden of demonstrating that there are no genuine disputes of material fact with respect to whether the doctrine of assignor estoppel bars OT from raising patent invalidity as a defense in this case.

Assignor estoppel is an equitable doctrine that "prevents one who has assigned the rights to a patent (or patent application) from later contending that what was assigned is a nullity." *Diamond Scientific*, 848 F.2d at 1224. The underlying legal rationale is that "an assignor should not be permitted to sell something and later to assert that what was sold is worthless, all to the detriment of the assignee." *Id.* In order to accomplish its equitable purpose, the doctrine also operates to bar other parties in privity with the assignor, from challenging the validity of a patent. *Id.*

Here there is, at the very least, a genuine dispute of material fact with respect to whether OT is barred by assignor estoppel from challenging the validity of the patents. Barney, as the assignor-inventor of each of the challenged patents, is barred by assignor estoppel from challenging the patents. See Mentor Graphics Corp. v. Quickturn Design Sys., Inc., 150 F.3d 1374, 1378 (Fed. Cir. 1998) ("[O]ne who assigns a patent surrenders with that assignment the right to later challenge the validity of the assigned patent.") OT also is barred from challenging the patents under the same doctrine because OT was in privity with Barney. See Shamrock Technologies, Inc. v. Medical Sterilization, Inc., 903 F.2d 789, 793 (Fed. Cir. 1990) ("Those in privity with the

assignor partake of [the] balance [of the equities]; hence, extension of the estoppel to those in privity is justified.") (citing *Diamond Scientific*, 848 F.2d at 1224).

Whether privity exists is a fact-specific inquiry that examines both the "closeness of the relationship" between the parties, *Intel Corp. v. U.S. Int'l Trade Comm'n*, 946 F.2d 821, 838 (Fed.Cir.1991), and "the equities dictated by [that] relationship." *Shamrock*, 903 F.2d at 793. "The closer that relationship, the more the equities will favor applying the doctrine' of assignor estoppel." *Mentor Graphics*, 150 F.3d at 1378 (quoting *Shamrock*, 903 F.2d at 793). In evaluating the "closeness of the relationship" "all contacts between [the parties], direct and indirect, must be considered, including the contacts between [other related parties]." *Intel*, 946 F.2d at 838.

Privity normally is found when a substantial employee-employer relationship exists (especially at the senior management level or relating specifically to commercializing the patented invention) and/or where the assignor-inventor holds an ownership interest in the party seeking to assert patent invalidity as a defense. *See, e.g., Diamond Scientific*, 848 F.2d at 1222, 1224 (assignor-inventor left plaintiff to form defendant); *Shamrock*, 903 F.2d at 794 (assignor-inventor worked for defendant as Vice President, owned 50,000 shares in defendant, and was hired specifically to commercialize the patented invention); *Intel*, 946 F.2d at 837-38 (assignor-inventor was president and executive officer of defendant and owned 40% of its shares); *Carroll Touch, Inc. v. Electro Mech. Sys., Inc.*, 15 F.3d 1573, 1579 (Fed. Cir. 1993), *overruled on other grounds*; *Nobelpharma AB v. Implant Innovations, Inc.*, 141 F.3d 1059, 1068 (Fed. Cir. 1998) (assignor-inventor was founder, president, principal executive officer, and owned stock in defendant corporation).

OT does not attempt to show that there is no genuine dispute of material fact with respect to whether it was in privity with Barney for purposes of assignor estoppel. As demonstrated below,

there are, at the very least, genuine disputes of material fact with respect to whether OT was in privity with Barney and therefore is barred by assignor estoppel from challenging the patents at issue.

A. OT Was In Privity With Mr. Barney.

In *Shamrock*, the Federal Circuit affirmed the trial court's grant of summary judgment barring defendant, MSI, from challenging a patent based on its privity with the assignor-inventor, Luniewski. The material undisputed facts in *Shamrock* were as follows:

- Luniewski left Shamrock to join MSI as Vice President in charge of Operations;
- Luniewski owned 50,000 shares [~1.67%] of MSI stock;
- MSI was formed in 1982 to sterilize surgical instruments and manufacture other medical goods; yet, as soon as Luniewski was hired in 1983, MSI built facilities for processing PTFE with radiation;
- Luniewski oversaw the design and construction of those facilities, and was hired in part to start up MSI's infringing operations;
- the decision to begin processing PTFE with radiation was made jointly by Luniewski and the president of MSI; and
- MSI began manufacturing PTFE with radiation in 1985, with Luniewski in charge of MSI's PTFE operation.

903 F.2d at 794. This case involves a closely analogous fact pattern:

- Barney left PR to join OT as a Managing Director;
- Barney owns 136.9 shares (~8.12%) of OT stock;
- OT was formed in 2003 to provide opinion-based expert analysis and consulting services relating to patents; yet as soon as Barney was hired in 2005, OT began incorporating non-opinion-based quantitative patent analysis into its business;
- Barney oversaw the design and construction of the PRS at each of OT's facilities, and was hired in part to start up OT's quantitative patent analysis business;
- The decision to begin generating quantitative patent analysis at OT's facilities was made jointly by Barney and the President of OT;

- OT began selling OT-generated quantitative patent analysis and related products and services to its clients in 2005; and
- Barney was in charge of OT's quantitative patent analysis business and all related operations.

(Add'l Facts ¶¶ 5-11; Barney Decl. ¶¶ 10, 12, 13, 17.) These facts, at the very least, demonstrate that genuine material disputes exist with respect to whether OT is barred by the doctrine of assignor estoppel from challenging the validity of the patents here. To hold otherwise would allow OT (and Barney as a substantial OT equity owner) to potentially gain the benefit of the free use of the patented inventions that Barney assigned to PR in exchange for valuable consideration. This is precisely the type of unfair and unjust result the doctrine of assignor estoppel was intended to prevent. *Diamond Scientific*, 848 F.2d at 1224.

B. Even If OT Was Not In Privity With Barney, OT Is Barred From Challenging The '476, '226, '581, '701, '560 and '996 Patents.

Even if this Court were to conclude that OT could conclusively establish that it was not in privity with Barney, OT nevertheless would be barred by assignor estoppel from challenging at least six of the eight patents it seeks to invalidate. The inventions disclosed and claimed in the '476, '226, '581, '701, '560 and '996 patents (the "Employee Inventions") each were conceived, developed, and made by Barney while employed full-time by OT, in the course of his normal employment, and using OT equipment and resources. (Add'l Facts ¶ 14; Barney Decl. ¶ 26.) Under Section 5.3 of the Employee Inventions to OT. (Add'l Facts ¶ 15; Ex. 5 § 5.3.) Under Section 5.3 of the License Agreement, OT had an obligation to assign the Employee Inventions to PR. (Add'l Facts ¶ 16; Ex. 2 § 5.3.) Barney assigned the Employee Inventions to PR in 2006 and 2007 while he was an employee of OT.

(Add'1 Facts ¶ 17; Barney Decl. ¶ 31.) Pursuant to the terms of the License Agreement, OT assigned the Employee Inventions to PR. (Add'1 Facts ¶ 18, Barney Decl. ¶ 32; Exs. 20-22.)⁵

Because Barney had an undisputed contractual obligation to assign the Employee Inventions to OT and because OT had an undisputed contractual obligation to assign the Employee Inventions to PR, OT is a direct assignor in fact of these six patents and is, therefore, barred by assignor estoppel from challenging their validity. *Mentor Graphics*, 150 F.3d at 1378. OT may dispute whether Barney was authorized to execute the patent assignments on behalf of OT and/or whether the assignments were executed solely in Barney's individual capacity. However, these disputes are immaterial because the Barney-executed patent assignments merely effectuated the substance of the pre-existing patent assignment obligations between Barney, OT and PR. *See*, *e.g.*, *Juniper Networks*, *Inc.*, *v. Palo Alto Networks*, *Inc.*, 15 F. Supp. 3d 499, 509 (D. Del. 2014) (finding that an assignment obligation contained in an executed employment contract was sufficient to create assignor estoppel even though the employee-inventor refused to execute the assignment agreement). Accordingly, at the very least, there are genuine disputes of material fact regarding whether OT is barred by the doctrine of assignor estoppel from challenging the '476, '226, '581, '701, '560 and '996 patents.6

⁵ The '701, '560 and '996 Patents are continuations or divisionals of the '226 Patent (Appl. Ser. No. 11/236,965) and were therefore included in the '226 assignment (Ex. 20.)

⁶ OT may argue that assignor estoppel cannot apply in this case because OT is also a licensee of the patents, and therefore, under *Lear*, OT can challenge the patents. The Federal Circuit, however, rejected that argument in *Acoustical Design v. Control Electronics Co.*, 932 F.2d 939, 943 (Fed. Cir. 1991). Relying on its prior decision in *Diamond Scientific*, the Federal Circuit concluded: "This argument [that *Lear* is controlling] is not persuasive. That a patent assignor takes back a license does not free him from the fact that he previously sold the patent for value. As the district court concluded, the assignor, in challenging the patent, is still asserting that what he sold is worthless, and the existence of a license back does not alter that fact. * * * We consider an assignor-licensee to be in a different situation from that of an ordinary licensee and view *Diamond Scientific* to be applicable even when there is a subsequent license back to the assignor." *Acoustical Design*, 932 F.2d at 943.

VI. AT A MINIMUM, GENUINE DISPUTES OF MATERIAL FACT EXIST WITH RESPECT TO WHETHER OT IS BARRED BY JUDICIAL ESTOPPEL FROM CHALLENGING THE VALIDITY OF THE PATENTS HERE, REPUDIATING ARGUMENTS IT PREVIOUSLY MADE TO THE PATENT OFFICE.

Even if OT was not barred by equitable estoppel and assignor estoppel from raising its patent invalidity defenses (which it is), OT would be barred (or, at the very least, there are genuine disputes of material fact regarding whether OT should be barred) by the doctrine of judicial estoppel from arguing positions regarding the validity of PR's patents here that are inconsistent with positions that OT took and prevailed upon before the Patent Office.

Judicial estoppel is an equitable doctrine that prevents parties from playing "fast and loose" with the courts by prevailing twice on opposing theories. *In re Airadigm Communications, Inc.*, 616 F.3d 642, 661 (7th Cir. 2010) (quoting *Butler v. Vill. of Round Lake Police Dep't*, 585 F.3d 1020, 1022 (7th Cir. 2009)). The purpose is "to protect the integrity of the judicial process" and prevent it "from being manipulated by chameleonic litigants who seek to prevail, twice, on opposite theories." *Id.* (quoting *Levinson v. United States*, 969 F.2d 260, 264 (7th Cir.1992)). Judicial estoppel also applies when one of the tribunals is the Patent Office. *See, e.g., Lampi Corp. v. Am. Power Prods., Inc.*, 228 F.3d 1365, 1377 (Fed. Cir. 2000).

The determination of whether a party's inconsistent legal positions constitute judicial estoppel depends upon three primary factors: (1) whether the "party's later position [is] 'clearly inconsistent' with its earlier position"; (2) "whether the party has succeeded in persuading a court to accept that party's earlier position, so that judicial acceptance of an inconsistent position in a later proceeding would create 'the perception that either the first or the second court was misled'"; and (3) "whether the party seeking to assert an inconsistent position would derive an unfair advantage or impose an unfair detriment on the opposing party if not estopped." *Airadigm*, 616 F.3d at 661.

Here there are, at the very least, genuine issues of material fact with respect to whether OT should be precluded by judicial estoppel from challenging the validity of the patents at issue.

For example, OT argues that all claims of the '476, '226 and '511 patents are invalid because they fail to define patent-eligible subject matter under § 101. (OT Mem. at 11-12, 18-19, and 23.) However, during OT's prosecution of those very patents, OT successfully argued that the claimed inventions, as defined by Claims 1-6 of the '476 patent, Claims 1-3, 6 and 7 of the '226 patent, and Claims 1 and 18 of the '511 patent, met the requirements for patent eligibility under § 101. (Add'l Facts ¶ 23; Ex. 25 at 1-3; Ex. 27 at 8-9; Ex. 29 at 7.)

Similarly, OT now argues that "[t]he claims of the ['226, '701, '560 and '996] Patents do not include elements sufficient to transform the abstract idea into a patent-eligible invention [under] the Alice framework [because] * * * [they] do nothing more than identify links between documents and then apply a well-known regression analysis tool . . ." (OT Mem. at 16-17.) However, during prosecution of OT's own related patents (which incorporate the common disclosures of the '226, '701, '560 and '996 Patents), OT successfully argued that these same elements (applying regression analysis techniques to certain characteristics of intellectual property) were novel and inventive in applications filed four years after PR's patents. (Add'l Facts ¶ 29; Ex. 41 at 16.)

In addition, OT argues that "[t]he claims of the ['992 and '511] Patents do not include elements sufficient to transform the abstract idea into a patent-eligible invention [under] the *Alice* framework" because "[t]he claims do no more than claim fundamental statistical tools implemented by a general-purpose computer." (OT Mem. at 21-22.) However, during the prosecution of OT's own related patents (which incorporate the common disclosures of the '992 and '511 patents), OT successfully argued that these same elements (calculating and applying

statistically determined patent rating measures) were novel and inventive in patent applications filed by OT more than seven years after PR's patents. (Add'l Facts ¶ 30; Ex. 42 at 8.)

Judicial estoppel forecloses OT from now taking inconsistent positions from the ones described above in order to attack the validity of PR's patents. As demonstrated above, OT now is taking positions that are "clearly inconsistent" with its earlier positions. OT's earlier arguments were successful before the Patent Office. Allowing OT to repudiate its earlier arguments and to advance its current arguments, merely because its position has changed, would provide an unfair advantage to OT and impose an unfair detriment on PR, especially because OT exclusively controlled the prosecution of PR's patents. *Airadigm*, 616 F.3d at 661.

For all of these reasons, there are, at the very least genuine disputes of material fact regarding whether OT is barred by judicial estoppel from attacking the validity of PR's patents, and the Motion should be denied.

VII. OT FAILS TO DEMONSTRATE THAT THE PATENTS ARE INVALID AS A MATTER OF LAW.

As noted above, if the Court determines that there are genuine disputes of material fact with respect to OT's Second or Third Affirmative Defenses, or with respect to whether OT is barred by equitable estoppel, assignor estoppel, and/or judicial estoppel from attacking PR's patents, the issue of patent validity is moot, and the Court need not (and, Barney and PR respectfully submit, should not) address the merits of OT's validity arguments. *See, e.g., Wireless Ink Corp. v. Facebook, Inc.*, 969 F. Supp. 2d 318, 338-39 (S.D.N.Y. 2013), *aff'd, Wireless Ink Corp. v. Google*, 570 Fed. Appx. 941 (Fed. Cir. 2014).

If, however, this Court decides to address the merits of OT's validity arguments, it should deny the Motion, because, as demonstrated below, OT fails to show that there is no genuine dispute as to any material fact, and that it is entitled to judgment as a matter of law.

A. Each Claim Of Each Patent Is Presumed Valid And This Presumption Can Only Be Overcome By Clear And Convincing Evidence.

Under § 282 of the U.S. Patent Act, "[a] patent shall be presumed valid" and "[t]he burden of establishing invalidity of a patent or any claim thereof shall rest on the party asserting such invalidity." 35 U.S.C. § 282. Moreover, "[e]ach claim of a patent (whether in independent, dependent, or multiple dependent form) shall be presumed valid independently of the validity of other claims; dependent or multiple dependent claims shall be presumed valid even though dependent upon an invalid claim." *Id.* Finally, a party seeking to establish that a particular claim of a patent is invalid must overcome the presumption of validity by "clear and convincing evidence." *Microsoft Corp. v. i4i Ltd. Partnership*, 131 S. Ct. 2238, 2251-52 (2011).

OT attempts to avoid a claim-by-claim validity analysis by unilaterally designating two claims (Claim 1 of the '560 Patent and Claim 1 of the '992 Patent) as purportedly "representative" and "exemplary" of the inventions disclosed and claimed in the Relevance Patents (4 patents, with 69 claims) and the Ratings Patents (2 patents, with 104 claims), respectively. (*See* OT Mem. at 4-5, 18-19.) With respect to the Valuation Patent and the Obsolescence Patent OT does not identify *any* claims, but merely summarizes and paraphrases what it considers to be "the claims" in each case. (*See* OT Mem. at 23-24.) OT's proffered expert, Dr. Thomas, also fails to specifically address each claim of each patent OT seeks to invalidate. Instead, Dr. Thomas examines only purportedly "representative" claims from each patent, leaving the vast majority of claims (171 out of 192) unexamined and unaddressed.

The Federal Circuit has expressly rejected this type of shortcut attempt to invalidate entire patents or portfolios based on unilaterally-designated "representative" claims. *See*, *e.g.*, *Shelcore*, *Inc. v. Durham Indus.*, *Inc.*, 745 F.2d 621, 625 (Fed. Cir. 1984) ("[A] party challenging the validity of a claim, absent a pretrial agreement or stipulation, must submit evidence supporting a

conclusion of invalidity of *each* claim the challenger seeks to destroy.") (emphasis original); *Ashland Oil, Inc. v. Delta Oil Prods. Corp.*, 685 F.2d 175, 178 (7th Cir.1982), *cert. denied*, 460 U.S. 1081 (1983) ("[I]t is error to invalidate all of a patent's claims when only a number of the patent's claims are actually litigated before the court."); *cf. Alice Corp. Pty. Ltd. v. CLS Bank International*, 134 S. Ct. 2347, 2352 and n.2 (2014).(noting that the parties had agreed on representative claims); *Content Extraction & Transmission LLC v. Wells Fargo Bank*, 776 F.3d 1343, 1346 (Fed. Cir. 2014) (affirming district court's designation of claims as representative where patentee did not object).

Accordingly, OT has failed to carry its burden on summary judgment with respect to at least 171 of the 192 claims it seeks to invalidate because it has failed to present *any* evidence, let alone clear and convincing evidence, as to those claims.

B. Patent Eligibility Under § 101 Should Be Construed And Applied Liberally Subject To Judicial Exceptions.

OT's validity challenge is based solely on 35 U.S.C. § 101, as recently interpreted by the Supreme Court in *Alice*, 134 S. Ct. 2347. Although the patent laws generally are to be construed expansively, *see Bilski v. Kappos*, 561 U.S. 593, 601 (2010) (quoting *Diamond v. Chakrabarty*, 447 U.S. 303, 308 (1980)), there are three well-established judicial exceptions to patent eligibility: laws of nature, natural phenomena, and abstract ideas. *Alice*, 134 S. Ct. at 2354. These exceptions are based on the concern that monopolizing these basic "building blocks of human ingenuity" through the grant of a patent "might tend to impede innovation more than it would tend to promote it, thereby thwarting the primary object of the patent laws." *Id.* (quoting *Mayo Collaborative Serv. v. Prometheus Lab., Inc.*, 132 S. Ct. 1289, 1293 (2012)).

The Supreme Court has cautioned, however, that these exceptions should not be allowed to swallow the rule. *Id.* "At some level, all inventions embody, use, reflect, rest upon, or apply laws

of nature, natural phenomena, or abstract ideas." *Alice*, 134 S. Ct. at 2354 (quotations omitted). Thus, the Supreme Court has recognized that "an application of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection." *Mayo*, at 1293-94 (quoting *Diamond v. Diehr*, 101 S. Ct. 1048 (1981)). Simply "stat[ing] the law of nature while adding the words 'apply it'" does not transform unpatentable subject matter into patentable subject matter. *Id.* at 1294. Conversely, "an invention is not rendered ineligible for patent simply because it involves an abstract concept." *Alice*, 134 S. Ct. at 2354. Courts "must distinguish between patents that claim the 'building blocks' of human ingenuity and those that integrate the building blocks into something more, thereby 'transforming' them into a patent-eligible invention." *Id.* (citations omitted) (quoting *Mayo*, 132 S. Ct. at 1303). "[T]he underlying functional concern . . . is a relative one: how much future innovation is foreclosed relative to the contribution of the inventor." *Mayo*, 132 S. Ct. at 1303.

C. Alice Does Not Eliminate Or Impose Any Special Requirements For Software-Implemented Inventions.

Alice stands for the proposition that an idea that belongs to the public cannot be taken away (i.e., become patent eligible) merely by implementing the idea on a computer or over the internet (or in some other "purely conventional" way). Alice does not stand for the broad "software-killing" proposition, as OT suggests, that any idea implemented through software on a computer or over the internet (even a new idea not in the public domain) is unpatentable as a matter of law or is held to a higher standard of patentability. Alice prohibits so-called "apply it" claims where the "it" is an idea that belongs to the public (an ineligible concept) and the applying steps, considered individually and as an ordered combination, are purely conventional. Alice, 134 S. Ct. at 2357 (quoting Mayo, 132 S. Ct. at 1300). Alice does not preclude patent eligibility where the "it" is a new idea that does not belong to the public (an eligible concept), or where the applying steps are

otherwise "sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the ineligible concept itself." *Id.* (quoting *Mayo*, 132 S. Ct. at 1300)).

Indeed, subsequent cases interpreting and applying Alice have made clear that software-implemented inventions remain patent eligible, provided they meet the requirements of § 101. See, e.g., DDR Holdings, LLC v. Hotels.com, L.P., 773 F.3d 1245, 1257 (Fed. Cir. 2014) ("[T]hese claims stand apart because they do not merely recite the performance of some business practice known from the pre-Internet world along with the requirement to perform it on the Internet. Instead, the claimed solution is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks."); Trading Technologies Int'l, Inc. v. CQG, Inc., No. 05-cv-4811, 2015 WL 774655, at *5 (N.D. III. Feb. 24, 2015) (holding that, "because the claims . . . are 'necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computers . . . the claims here satisfy the requirements of 35 U.S.C. § 101."); Ameritox, Ltd. v. Millennium Health, LLC, No. 13-cv-832-wmc, 2015 WL 728501, at *23 (W.D. Wis. Feb. 18, 2015) ("This type of improvement in existing technology [quantifiable analysis of urine samples] is the type of invention that the statute seeks to encourage, not dismiss."); France Telecom S.A. v. Marvell Semiconductor Inc., 39 F. Supp. 3d 1080, 1092, 1093 (N.D. Cal. 2014) (finding the claims are "narrow and they confine and tie down the otherwise abstract processes cited" and provide "inventive concepts' that exceed the prior art, namely coding in parallel and a novel method of iterative coding"); Cal. Inst. of Tech. v. Hughes Communs. Inc., No. 2:13-cv-07245-MRP-JEM, 2014 WL 5661290, at *12 (C.D. Cal. Nov. 12, 2014) (stating that "computer software and codes remain patentable.... Moreover, Alice did not significantly increase the scrutiny that courts must apply to software patents. It held only

that an ineligible abstract idea does not become patentable simply because the claim recites a generic computer.")

Indeed, OT has admitted as matter of public record that the "Alice [decision] neither creates a per se excluded category of subject matter, such as software or business methods, nor imposes any special requirements for eligibility of software or business methods." Layden Decl. ¶12; Ex. 46 at 18.)

D. This Court Should Give The Declaration Of Dr. Thomas Little Or No Weight.

OT's Motion relies heavily upon the Declaration of Dr. Patrick Thomas. This Court, however, should give little or no weight to the Thomas Declaration because it is replete with legal opinions and conclusions that Dr. Thomas is demonstrably not qualified to offer. Dr. Thomas repeatedly references his legal analysis to support his (legal) conclusions that each patent claim: is "directed to abstract ideas" "under the first step of the two-step Alice test" (*see*, *e.g.*, Thomas Decl. ¶ 73, 76-77, 92, 96-99, 102, 106, 109, 114, 118, 120, 139, 140-141, 145, 147, 149, 154, 156-157, 161-162); does not contain "an 'inventive step' under the second part of the Alice test" (*see*, *e.g.*, *id*. ¶ 76, 97, 102, 109, 119-120, 140, 146, 149, 155, 161); fails to meet "the Bilski 'machine or transformation' test" (*see*, *e.g.*, *id*. ¶ 77, 98, 103, 120, 141, 148-149, 156, 162); and/or does not "qualify as patent-eligible subject matter under current patent law" (*see*, *e.g.*, *id*. ¶ 78, 164). These are all legal conclusions that determine the outcome of the issues sought to be adjudicated and, therefore, should be disregarded or given little weight.

Dr. Thomas is not a lawyer. (*See* Thom. Dep., p. 100, lines 2-22.) Moreover, Dr. Thomas revealed in his deposition that, in forming his understanding of the law regarding patent eligibility, he only read the two cases (*Alice* and *Bilski*) referenced in his declaration and no other cases (*Id.* at p. 48, 1. 9 thru p. 49, 1. 6). Dr. Thomas also admitted that he is "not an expert in computer software"

nor an expert in the patent eligibility of software-implemented inventions. (*Id.* p. 132, l. 18—p. 133, l. 16.)

In any event, Dr. Thomas' conclusions regarding the law governing patent eligibility of software-implemented inventions are incorrect. For example, according to Dr. Thomas, an "inventive step" under the second prong of the *Alice* framework requires "some improvement or enhancement to a *physical* process or *tangible* outcome beyond just simply the abstract idea." (*Id.* at p. 63, l. 8-16) (emphasis supplied). This requirement would preclude patent eligibility of all software-implemented inventions, which is not the law. *See*, *e.g.*, *DDR Holdings*, 773 F.3d at 1255.

OT's reliance upon the Thomas Declaration also is misplaced because Dr. Thomas repeatedly asserts that certain concepts or processes are "conventional" or "well-known" without analyzing whether they were considered conventional or well-known *before* the effective filing date of each of the challenged patents.

For example, Dr. Thomas suggests the claimed inventions of the Relevance Patents are similar to "[c]itation-based metrics such as [the Hirsch Index, which] are widely quoted, and are frequently used in hiring and tenure decisions for academic researchers." (Thomas Decl. at ¶ 33.) But, the Hirsch Index was only first disclosed in November 2005 by UCSD physicist Jorge E. Hirsch in a paper published a few months *after* the effective filing date of the Relevance Patents (Barney Decl. ¶ 33; Ex. 43). As a result, the Hirsch Index could not possibly have been "widely quoted" or "frequently used" at the time the Relevance Patents were filed.

Dr. Thomas similarly states that analysis of indirect citation links provide "the basis for algorithms in social media such as LinkedIn and Facebook to offer a new potential contact (*i.e.*, a direct link) to users based the number of other individuals they have in common with that contact

in the network (i.e. indirect links)." (Thomas Decl. at ¶91.) But, again, Dr. Thomas does not assert or present any evidence whatsoever establishing that these social media algorithms were known (let alone "well-known") before the relevant filing date. Dr. Thomas further states that "[t]he PatentRatings relevance system is also very similar to the neighbor searching algorithm developed by CHI Research and described in US Patent #7,433,884." But that patent was not filed until Sep 29, 2004 and was not published until April 6, 2006 -- more than six months *after* the relevant filing date. (Barney Decl. ¶ 50; Ex. 44.)

With respect to the Ratings Patents, Dr. Thomas asserts that "PatentCafe introduced a Patent Factor Index a number of years ago, with the same idea of rating patents automatically." (Thomas Decl. ¶ 130.) But, the Patent Factor Index was only first launched on June 16, 2005, nearly 6 years after the effective filing date of the Ratings Patents (*See* Declaration of Andy Gibbs ("Gibbs Decl.") Tab C ¶ 4; Ex. 45). Dr. Thomas similarly alleges that: "In our own practice at 1790, we provide clients with Patent Evaluation Scores that use quantitative metrics to identify key patents in selected portfolios [and] we publish an annual Patent Power Scorecard in IEEE Spectrum that ranks companies based on the size and quality of their patent portfolios, with quality measured based on quantitative patent metrics." (Thomas Decl. ¶¶ 130-131.) However, Dr. Thomas admitted in his deposition testimony that 1790 Analytics has only been providing such quantitative metrics for about the past five or six years. (Thomas Dep. at p. 108 ll. 3-18.)

For all of these reasons, Barney and PR respectfully submit that the Thomas Declaration should be given little or no weight.⁷

⁷ Barney and PR retained a consulting expert in connection with preparing their response to the Motion. Barney and PR decided, however, that, given the many factual and legal reasons why the Motion should be denied, and the readily demonstrable contradictions and flaws in the Thomas Declaration, not to proffer expert testimony as part of this response.

E. The Inventions Claimed By The Challenged Patents Are Patent Eligible Under The Framework Articulated in *Alice*.

Alice articulates a two-step process to distinguish between patents that claim ineligible concepts from those that claim patent eligible applications of those concepts. Alice, 134 S. Ct. at 2354 (relying on Mayo, 132 S. Ct. 1289, 1303, 1294 (2012)). First, a court must determine whether the claims of the patent are directed to a patent-ineligible concept: laws of nature, physical phenomena, and abstract ideas. Alice, 134 S. Ct. at 2355. Second, the court must "consider the elements of each claim both individually and 'as an ordered combination' to determine whether the additional elements 'transform the nature of the claim' into a patent-eligible application." Alice, 134 S. Ct. at 2355 (quoting Mayo, 132 S. Ct. at 1298, 1297). This second step requires a search for an "inventive concept," or some element or combination of elements sufficient to ensure that the claim in practice amounts to 'significantly more' than a patent on an ineligible concept." DDR Holdings, 773 F.3d at 1255 (quoting Alice, 134 S. Ct. at 2355). At the very least, the claims must "do more than simply instruct the practitioner to implement the abstract idea ... on a generic computer." Alice, 134 S. Ct. at 2359.

OT has not met its burden of demonstrating that there are no genuine disputes of material fact with respect to whether each claim of the challenged patents is directed to an "abstract idea" or otherwise lacks an "inventive concept" sufficient to transform the claim into a patent-eligible application.

1. The Relevance Patents

The Relevance Patents are addressed generally to "the field of document searching, data mining and data visualization" *See* OT App. Tab 2, col. 1, ll. 10-11) and, more particularly, to "specialized searching applications, particularly in the science, technology, academic and legal fields." (*See id.*, col. 1, ll. 33-35.) The patents identify and describe a number of problems with

conventional computerized search engines that the inventions are intended to solve. (*See id.* col. 1, ll, 12-24, 42-67; col. 2, ll. 1-11, 40-67; col. 3, ll. 1-15.)

OT argues that all of the claims of the Relevance Patents "are directed to computer implementation of abstract concepts [because t]hey simply require a computer to count and identify links between documents and then apply a well-known statistical tool to the data to determine the probability that one document cites to another." (OT Mem. at 14.) As a result, OT contends, the claims are overly broad and improperly attempt to monopolize or pre-empt "the use of widespread, long-standing and well-known standard practices of statistical modeling and citational relatedness." (*Id.* at 13.) OT is wrong.

OT's argument depends upon ignoring the distinctive character of the claims in the Relevance Patents. Contrary to what OT contends, none of the claims are solely directed to "count[ing] and identify[ing] inkslinks between documents" and applying "a well-known statistical tool." (OT Mem. at 14.) Like the claims at issue in *DDR Holdings*, the claims of the Relevance Patents are "necessarily rooted in computer technology," *DDR Holdings*, 773 F.3d at 1255, and are specifically directed to solving technical problems in the field of computerized document searching, namely, slow search processing time, production of irrelevant documents, failure to identify relevant documents, and poor communication of input/output search criteria and search results.

In fact, Dr. Thomas highlights one of the key difficulties encountered when using multi-generation citation networks to identify potentially relevant documents, noting that, while "it is a simple programming task to construct citation networks covering any number of generations, and including any number of documents[,] [u]ltimately, almost all documents in the

network are likely to be connected (similar to the 'six degrees of separation' that supposedly link all individuals across the world)." (*See* Thomas Decl. ¶ 27.)

That is precisely the problem addressed by the Relevance Patents: how to efficiently sort through and prioritize the massive data output (potentially the entire data set) that results from even a simple input search query. The claimed inventions solve or mitigate this problem by, among other things, probabilistically quantifying a degree of relatedness between citationally or contextually related documents by determining an event probability of a direct (first generation) citation based on analyzing indirect citations occurring at generations higher than the first generation. This allows a search engine to more efficiently identify and return a smaller number of more relevant documents, according to a quantified degree of relatedness to the input data set.

OT has presented no evidence establishing or suggesting that this particular claimed feature was "widespread, long-standing [or] well-known" prior to the invention thereof by Barney. In fact, Dr. Thomas admitted in deposition testimony that this claimed feature was "the major difference" between the Relevance Patents and the CHI neighbor searching algorithm and he was not aware of any other "well-known algorithms ... that exclude direct links but use a regression model to forecast relatedness". (Thomas Dep., Tab D at 101-102, 112.)

Because the CHI algorithm did not employ the solutions disclosed and claimed by the Relevance Patents it had no way to handle a large input data set. According to the CHI '884 patent, "if an entire organization's portfolio were entered, a set of nonsensical results would be obtained after an interminable delay." (Ex. 44, col. 2, ll. 2-5.) The inventions disclosed and claimed by the Relevance Patents solved these and other challenging problems in the field and thereby improved the state of the art. These claimed improvements have led to many other important developments in the field, including the construction of specialized search engines having faster processing time,

more efficient performance, more robust input/output capabilities and superior search results. For example, a multi-billion-record search index created using these patented improvements provides the core backbone of OT's own specialized patent search engine, the RelevanceTM module, which Ocean Tomo claims is a "superior" search engine "allowing clients to identify and quantify the contributory effect of citations, harnessing the 'wisdom of the crowd' and eliminating the inconsistencies and erroneous output created by language and/or translation barriers." (Ex. 48 at 1-2.)

Other major companies in the industry, including Amazon, AT&T, Fuji Xerox, General Electric, Google, IBM, LexisNexis, LG Electronics, Microsoft, Nokia, OT, Oracle, Qualcomm, Red Hat, SAP, Thomson Reuters, and Yahoo!, have referenced the Relevance Patents in connection with their own patented solutions and improvements in the field. (Ex. 49 at 32-33.)

For all of these reasons, there are, at a minimum, genuine issues of material fact with respect to whether the Relevance Patents are directed to an ineligible "abstract idea."

Even if this Court were to find that the claims of the Relevance Patents are directed to an abstract idea, the second part of the *Alice* framework requires this Court to "determine whether the additional elements 'transform the nature of the claim' into a patent-eligible application." *Alice*, 134 S. Ct. at 2355 (quoting *Mayo*, 132 S. Ct. at 1298, 1297). OT argues that the claims "do nothing more than conventional computer functions," such as "receiving information," "accessing a stored computer accessible database," "determining relationships between objects," and "calculating a probability." (*See* OT Mem. at 16.)

OT, however, impermissibly dissects each claim into its constituent elements and then concludes that each element is old and well-known. This is an incorrect analysis because every new idea is nothing more nor less than a new combination of old elements. *See Diehr*, 450 U.S. at

188 ("It is inappropriate to dissect the claims into old and new elements and then to ignore the presence of the old elements in the analysis."); *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418-19 (2007) ("[I]nventions in most, if not all, instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known."); *Fromson v. Advance Offset Plate, Inc.*, 755 F. 2d 1549, 1556 n.3 (Fed. Cir. 1985) ("Only God works from nothing. Men must work with old elements.")

In searching for an "inventive concept," courts must not dissect the claims, but must "consider the elements of each claim both individually and 'as an ordered combination." *Alice*, 134 S. Ct. at 2357 (quoting *Mayo*, 132 S. Ct. at 1297). In the present case, the claims require, *inter alia*, probabilistically quantifying a degree of relatedness between citationally or contextually related documents by determining an event probability of a direct (first generation) citation based on analyzing indirect citations occurring at generations higher than the first generation. (OT App. Tab 2 Claims 1, 6, 7; *Id.* Tab 3 Pat. Claims 1, 13; *Id.* Tab 4 Claims 1, 6, 11; '996 Pat. Claims 1, 13.) This concept, considered either individually or as part of an ordered combination along with the other recited claim elements, is sufficiently unique and inventive to ensure that the Relevance Patents "recite an invention that is not merely the routine or conventional use of [a computer or] the Internet." *DDR Holdings*, 773 F.3d at 1255.

OT argues, however, that "elements involving functions such as calculations . . . and data manipulation . . . do not sufficiently transform the claim to survive the second part of the *Alice* framework." (OT Mem. at 15). In support, OT cites dicta from *Digitech Image Techs.*, *LLC v*. *Elecs. for Imaging, Inc.*, 758 F.3d 1344, 1351 (Fed. Cir. 2014) suggesting that "a process that employs mathematical algorithms to manipulate existing information to generate additional information is not patent eligible." *Id.* This is an incorrect interpretation of the holding in *Digitech*

and a misstatement of the law regarding patent eligibility of software-implemented inventions. *See Cal. Inst. of Tech.*, 2014 WL 5661290, at *9; *see also Diamond v. Diehr*, 450 U.S. 175, 192-93 S. Ct. 1048 (1981) (software-implemented invention that relied upon a mathematical algorithm held to be patent eligible); *DDR Holdings*, 773 F.3d at 1255 (software system for serving web pages over the internet patent eligible).

OT also argues that the Relevance Patents claim "concepts that could be performed in the mind or with pen and paper." (*See* OT Mem. at 11-13.) But that is a fruitless analysis for considering the patent eligibility of a software-implemented invention. First, OT does not identify any known human capable of probabilistically quantifying, even with pencil and paper, a degree of relatedness among millions of potentially relevant documents in a way that solves the identified problems associated with conventional search engines. Second, even if a human could somehow perform such a feat (*e.g.*, over the span of millions of years), that alone does not defeat the utility of a novel computer-implemented process that can do it more quickly and more efficiently. *See Cal. Inst. of Tech*, 2014 WL 5661290, at *16.

Finally, OT argues that the claims of the Relevance Patents do not pass muster under the *Bilski* machine-or-transformation test because they "do not alter the efficiency of the computer." (*See* OT Mem. at 18) That also is incorrect. First, the machine-or-transformation test is not a requirement under *Alice*, but is merely a "useful and important clue." *DDR Holdings*, 773 F.3d at 1255. Second, the claimed inventions *do* "alter the efficiency of the computer" because they enable the computerized search engine to operate faster, produce more relevant search results, and consume less energy. Moreover, generating and storing search result sets and/or search indexes comprising pre-calculated relevance scores (*e.g.*, Claims 2-3 of the '226 Patent, Claims 7-9 of the '701 Patent, Claims 1-15 of the '560 Patent, and Claims 1-19 of the '996 Patent) greatly increases

the operating speed and efficiency of the computer and reduces the storage space that would otherwise be required with conventional computerized document searching techniques.

For all of the reasons stated above, there are, at a minimum, genuine issues of material fact with respect to whether the Relevance Patents disclose and claim "new and useful improvement[s]" in the field of document searching, data mining and data visualization which have "promote[d] the progress of science and the useful arts" in accordance with the policies underlying § 101. Accordingly, OT fails to demonstrate that it is entitled to judgment in its favor on the validity of the claims of the Relevance Patents.

2. The Ratings Patents

The claimed inventions of the Ratings Patents are directed to a computer-automated system for rating or valuing patents or other intellectual property assets. Dr. Thomas acknowledged the potential utility and value of such a system: "A system that can identify the most valuable patents is of interest to a wide range of stakeholders, not just academic researchers. This is especially true if this system can operate largely automatically, without manual reading of individual patents, thus potentially making it both timely and cost-effective." (See Thomas Decl. at ¶ 130)

The Ratings Patents identify and discuss known problems with prior art valuation approaches, including a computer-automated patent valuation system.

OT has acknowledged that, prior to the advent of the PR System "it was effectively impossible to reliably and reproducibly value a company's intellectual property." (Ex. 51 at 3.) OT also argues that all of the claims of the Ratings Patents "do nothing more than use a computer to extract data from a database relating to patents and then apply a well-known regression analysis tool to the data to predict outcomes." As a result, OT concludes that "the Ratings Patents claims are directed to an abstract idea."

Again, OT's analysis ignores and reads out of the claims much of their distinctive character. None of the claims of the Ratings Patents are solely directed to "extract[ing] data" and applying "a well-known regression analysis." Like the asserted claims in DDR Holdings, the claims of the Ratings Patents are "necessarily rooted in computer technology," DDR Holdings, 773 F.3d at 1255, and are specifically directed to solving problems that existed with prior art computer-automated valuation systems, namely, lack of suitable input data, slow processing time (even using a high-speed computer), and undetermined statistical accuracy. The claimed inventions solve or mitigate these and other problems by, among other things, constructing a computer regression model based on particular selected metrics extracted from a first and second population of patents and using the regression model to rate or rank patents in a third population of patents in accordance with a determined probability of one or more selected qualities of interest being present or absent (e.g., likelihood of infringement, validity, or maintenance) according to a determined statistical accuracy. The claimed solution increases the speed and accuracy of a computer-automated patent rating/valuation system and expands the input data sources that can be used to build an effective rating or valuation model.

Other major companies, including Accenture, Amazon, American Express, AT&T, Boeing, CHI Research, Ford Global, Goldman-Sachs, Hewlett-Packard, Hitachi, IBM, Intuit, Microsoft, Nielsen, Ocean Tomo, Samsung, Siemens, West Publishing, and Yahoo!, have referenced the Ratings Patents in connection with their own patented improvements in the field. (Ex. 50 at 25-30.) In fact, the '992 patent alone has received to date 159 references ("forward citations") from later-filed patent applications. (Ex. 50 at 1.) As observed by Dr. Thomas, "highly cited patents ... tend to contain technological information of particular importance. As such, they

form the basis for many new innovations, and so are cited frequently by later patents." (See Thomas Decl. at \P 24.)

The Ratings Patents thus disclose and claim "new and useful improvement[s]" in the field of computer-automated valuations/ratings which have "promote[d] the progress of science and the useful arts" in accordance with policies underlying § 101 and Article I, § 8 of the U.S. Constitution. The claims of the Ratings Patents are not merely directed to the abstract idea of "extract[ing] data" and applying "a well-known regression analysis." Moreover, the claims do not preempt every way of extracting data from patents or applying regression analysis. For example, Dr. Thomas admits that the Patent Evaluation Scores and the IEEE Patent Power Scorecards provided by 1790 Analytics patent rating systems do not practice and therefore are not preempted by the Ratings Patents. (Thomas Dep. at 109.) PatentCafe founder and former CEO Andy Gibbs also testified that PatentCafe's Patent Factor Index is entirely different from and not preempted by the Ratings Patents or any of the other challenged patents. (Gibbs Decl., at Tab C at 6-7.) Accordingly, OT has not met its burden of proving by clear and convincing evidence that all claims of the Ratings Patents are directed to an ineligible "abstract idea."

OT argues that the claims in the Ratings Patents are "nothing more than a recitation of basic functions that any conventional computer routinely handles (e.g., obtaining data, using a computer to access data files, inputting data, storing the output)" (OT Mem. at 22) Again, OT impermissibly dissects each claim into its constituent elements and then concludes that each element is old and well-known. This is an incorrect analysis as noted above.

It is convenient for OT to now argue with the benefit of hindsight that these concepts were all "old and well known in the industry." (OT Mem. at 20). But prior to being exposed to the concepts and prior to the current litigation OT believed that the claimed inventions represented a

key breakthrough in the industry. Senior OT executives described the inventions as "huge," reflecting "great insight" and even comparing them to "what Einstein did for physics." (Ex. 19 at 1.) For example, Malackowski described how the claimed inventions uniquely enabled OT to conduct comparative trend analysis of entire patent portfolios over time: "[This] may not seem like a big deal, but it's huge because ... I can look back at Ford Motor Company portfolio and see how it's evolved and changed before, and then I can do a comparative analysis. So I can look at not only how Ford evolved and changed, but I can relate that to how BMW and Chrysler is doing. From a predictive toolset, I have never seen that in a quantitative model before. We had done work like that when I was at Ford Motor Company but it was very laborious and all manual labor. This was a big deal." (Ex. 47 at 56-57.)

For all of the reasons stated above, OT has failed to demonstrate that it is entitled to judgment with respect to the validity of the Ratings Patents.

3. The Valuation Patent

OT provides only very brief and cursory analysis of the '476 Patent because, according to Dr. Thomas, "it is not central to the current disputes related to the PR portfolio." (Thomas Decl. ¶ 150). OT summarily argues that "[a]s noted with respect to the Ratings Patents, the idea of relating patent metrics (in this case the payment of maintenance fees) to an outcome (in this case a calculated value) is old and well known in the field." For the same reasons stated above with respect to the Ratings Patents PR submits that the claims of the '476 patent also satisfy the requirements of 35 U.S.C. § 101.

4. The Obsolescence Patent

OT provides again only very brief and cursory analysis of the '581 Patent. OT argues that the claimed methods are "nothing more than the computer implementation of curve estimation techniques that are basic fundamental tools in forecasting." Again, however, OT summarizes and

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paraphrases the claims, reading out much of their distinctive character. None of the claims of the

'581 Patent are merely directed to generic "curve estimation techniques." For example, Claims 1-2

and 5-8 require using a computer to: i) iteratively determine coefficients of a lognormal probability

distribution function based on forward citations occurring during a first period of time, ii)

iteratively determine coefficients of an exponential decay function based on forward citations

occurring during a second period of time beyond the first period of time, and iii) store a predicted

depreciation schedule comprising a combination of the lognormal probability distribution function

and the exponential decay function. Claims 3-4 require: i) determining a first function which

approximately describes a rate of initial increase in expected forward citations over time, ii)

determining a second function which approximately describes a rate of eventual decay in expected

forward citations over time, the second function representing obsolescence of the patent, and iii)

constructing an estimated depreciation schedule using a calculated decay coefficient derived from

the first and second functions.

OT has presented no evidence establishing or suggesting that these particular solutions

were "fundamental tools in forecasting" prior to the invention thereof by Barney. For the reasons

stated above, the claims of the '581 Patent satisfy the requirements of 35 U.S.C. § 101.

CONCLUSION

WHEREFORE, for all of the reasons set forth above, Jonathan Barney and PatentRatings,

LLC respectfully request that this Court enter an Order denying the Motion in its entirety, and

granting such other and further relief as is just and proper.

Dated: May 11,14, 2015

JONATHAN BARNEY and PATENTRATINGS, LLC

By: /s/ David C. Layden

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One of their attorneys

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